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Title: SOME PRELIMINARY STUDIES ON THE SHELF LIFE OF RT CURE GLASS -EPOXY PREPREG

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Abstract :

Preliminary studies were carried out on the storage life of prepregs made out of bifunctional epoxy resin system (Imported resin system LY5052/HY5052) as matrix and glass fiber as reinforcement and maintained at sub-ambient temperature(-18°C). Composite laminates were prepared out of these prepregs at room temperature by using the vacuum bag technique. The thermal (Glass transition temperature, Tg) properties were evaluated and compared with a composite prepared in a conventional way (without the usage of pre impregnated plies) at room temperature employing a similar moulding technique. These studies established the maximum storage period of prepregs to be 20days at -18°C with optimized processing techniques and thermal properties.